

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXXVI.

THURSDAY, MARCH 7, 1867.

No. 5.

INFLUENCE OF MARRIAGE ON LONGEVITY.

MESSRS. EDITORS,—The accompanying paper on the influence of marriage on longevity was sent to the American Statistical Association by Dr. Stark, one of its corresponding members, and the accomplished and learned Chief of the General Registry Office of Scotland. After being read and warmly approved by the Association, at its last meeting, it was voted that it should be sent to your JOURNAL for publication.

The doctrines are new here and to the world abroad. But if the reports of marriages and mortality in Massachusetts and in other States could be submitted to the same analysis, without doubt they would show that the chances of life are improved for women and very much improved for men, here as well as in Scotland.

Truly yours,

EDWARD JARVIS.

Dorchester, February 11, 1867.

INFLUENCE OF MARRIAGE ON THE DEATH-RATE OF MEN AND
WOMEN AT DIFFERENT AGES, IN SCOTLAND.

By JAMES STARK, M.D., F.R.S.E.

It is now a proved fact that, in Scotland, males at all periods of life above 15 years of age are cut off in higher proportions than females. In fact, a nine years' average shows that, at all ages, excepting from 10 to 16 years, when the female death-rate very slightly preponderates, males in Scotland die in a higher proportion than females.

Table I. shows these facts; and the results may be thoroughly depended upon, as they are founded on a nine years' registration of the deaths—no death in Scotland escaping registration, and the people being extremely particular to register the exact age at death.

Taking that table as a whole, and comparing the deaths at each period of life in the sexes, it will be seen that the additional dangers to which females are liable during child-bearing do not cause their death-rate to rise so high as that of the males, who are exempt from all such dangers.

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But a far more important inquiry, and one which has not hitherto been investigated, in consequence of the difficulty of procuring exact facts which could be depended on, is, What is the effect of marriage on male and female life? Is its influence, in so far as the death-rate is concerned, for good or for evil? Is its influence limited to the female, or has it also a marked influence on the duration of life in the male?

TABLE I.—*Mean annual Percentage of Deaths to the Population at different ages in Scotland during the years 1855 to 1863 inclusive.*

AGES.	PERCENTAGE OF DEATHS TO POPULATION AT EACH AGE.	
	Males.	Females.
Under 5	6.238	5.686
5—10	0.924	0.892
10—15	0.501	0.513
15—20	0.731	0.662
20—30	1.006	0.817
30—40	1.077	1.021
40—50	1.388	1.186
50—60	2.099	1.771
60—70	3.933	3.308
70—80	9.410	8.266
80—90	20.011	18.075
90—100	37.700	36.325
100 and above	39.652	41.979
All ages	2.216	2.023

So far as I know, no attempt has been made by any statist to trace the effects of marriage on the sexes. Even Quetelet, in his masterly treatise on Man, has not hinted that marriage has any influence on human mortality.

In a paper "On the Sanitary State of Edinburgh," which I published in 1847, both separately as a pamphlet, and in the *Edinburgh Medical and Surgical Journal*, I mentioned a fact which I had ascertained regarding this subject. From the mortality returns which at that time I procured, it appeared that the mean age at death of the married was 57.54 years, while that of the unmarried, above 22 years of age, was only 42.18 years. That result seemed so extraordinary that I was led to doubt the accuracy of the returns of the ages; but from that day to the present I have had no opportunity of following out the investigation.

In an inquiry like the present everything depends on the correctness of the returns from which the tables are drawn up; for if these returns were imperfect, either from not including the whole deaths, or from not specifying the ages and conditions, no trust could be reposed in the tables prepared from them. It is equally necessary, in an inquiry like this, that the census of the population should have been so accurately taken, as that the exact number of married and unmarried men and women, at every age of life, should be accurately ascertained. On all these points the Scottish statistics may be depended on, inasmuch as it is believed that almost no death escapes registration; and the Scotch are so particular in recording the exact age and condition of their departed relatives that every confidence may be placed

in the accuracy of the registers. As to the census, that of 1861, on which the tables are founded, was prepared under my own eye, and wherever defective entries had been made, the registers were returned to the enumerators in order that the errors might be corrected, or the parties themselves were communicated with, in order that the abstracts might be as perfect and trustworthy as possible.

As it is necessary to inquire into the influence of marriage on the sexes separately, we shall begin with its influence on males.

I.—Death-rate of Married and Unmarried Men.

Table II. is drawn up with the view of showing the influence of marriage on the male sex in Scotland; and it may be stated once for all that all the widowed are necessarily included among the married, and the ages are grouped into quinquennial periods, for the sake of easy reference and more accurate comparison.

TABLE II.—*Married and Unmarried Men at each quinquennial period of Life in Scotland in 1863; the Deaths at the same Ages; and the Percentage of Deaths to the Living at each Age. (Year 1863.)*

AGES.	HUSBANDS AND WIDOWERS.			BACHELORS (unmarried).		
	Number Living.	Deaths.	Percentage.	Number Living.	Deaths.	Percentage.
20 & under 25	22,946	137	0.597	106,587	1251	1.174
25—30	54,221	469	0.865	48,618	666	1.369
30—35	66,153	600	0.907	28,992	383	1.475
35—40	63,558	690	1.080	15,857	253	1.595
40—45	62,645	782	1.243	12,311	208	1.689
45—50	54,505	869	1.594	8,824	179	2.028
50—55	49,591	880	1.774	7,636	205	2.684
55—60	38,006	929	2.444	5,550	142	2.558
60—65	35,920	1216	3.385	5,242	227	4.330
65—70	22,021	1134	5.149	2,848	156	5.477
70—75	16,029	1291	8.055	2,021	205	10.143
75—80	9,716	1135	11.681	1,081	157	14.542
80—85	5,477	953	17.400	513	101	19.688
85—90	1,708	488	28.571	151	32	21.192
90—95	449	137	30.512	50	21	42.000
95—100	103	40	38.835	6	3	50.000
100 and above	28	15	53.571	3	—	—
Not stated	—	4	—	—	5	—
All ages	503,376	11,769	2.338	243,259	4,194	1.723

Table II. is a very remarkable one, and the results quite startling as to the immense difference between the mortality of the married and the unmarried. By that table it appears that at every age from 20 to 85 the death-rate of the married men is much smaller than that of the unmarried. After the 85th year of life the numbers are too small to afford the means of accurate comparison, unless they had been extended over a series of years. Thus, reading the tables without the decimals, so as to make it more easily intelligible, of every hundred thousand unmarried men between the ages of 20 and 25 years, 1174 died during the year; but of a like number of married men only 597 died, or just one half the number. In other words, between the ages of 20 and 25 years the death-rate of bachelors was exactly double that of the married men!

As the age increases, this difference in the death-rates of the mar-

ried and unmarried decreases; but it decreases slowly and regularly, showing a marked difference in favor of the married man at every period of life. Thus, at the ages 25 to 30 years, when the number of married and unmarried men in Scotland is pretty nearly equal, of every hundred thousand bachelors 1369 died during the year; but in an equal number of married men only 865 died. At that period of life, also, the death-rate of the bachelor very greatly exceeded that of the married man.

Between the ages of 30 and 35, while in every hundred thousand bachelors 1475 died, only 907 died out of an equal number of married men.

We need not go in detail over every separate age; but between the ages of 40 and 45 years, while 1689 died during the year out of every hundred thousand bachelors, only 1248 died out of an equal number of married men. At the ages 60 to 65 years, while 4330 died out of every hundred thousand bachelors, only 3385 died out of a like number of married men. Even at the age 70 to 75 years, while 10,143 died during the year out of every hundred thousand bachelors, only 8055 died out of a like number of married men. Nay, even at the extreme age 80 to 85 years, while 19,688 died during the year out of every hundred thousand bachelors, only 17,400 died out of a like number of married men.

Here, then, we have the remarkable fact, for the first time proved by trustworthy statistics, that the influence of marriage on the male mortality is of the most potent kind; that, in fact, the bachelor life is much more destructive to the male sex than the most unwholesome of trades, or than a residence in a house or district where there is not the most distant attempt at sanitary arrangements of any kind.

This fact is rendered still more striking if we calculate the mean age at death of the married and the unmarried men. If we reckon the whole married and the whole unmarried in the above table, viz., from 20 years to the close of life, we find that the mean age at death of the married men was $59\frac{7}{10}$ years; whereas the mean age at death of the bachelors was only 40 years! Reckoning from the 20th year of life, therefore, married men have a chance of living $19\frac{1}{2}$ years longer than those who remain bachelors!

In the general population, however, about the 24th year of life the number of bachelors and married men is about equal. It will therefore afford a more unexceptionable average if we strike from the table all persons under 25 years, and calculate the mean age at death from the 25th year to the close of life. When this is done, it is found that at death the mean age of the married men was $60\frac{2}{10}$ years, while the mean age of the bachelors was only $47\frac{7}{10}$; giving $12\frac{1}{2}$ years in favor of the married!

This is a remarkable fact; and apparently a special provision of nature to protect the father of a family, in order that he may provide for his offspring and superintend their rearing. It is quite true that

this special protection from death is based on fixed laws of nature, by which we see that the generally quiet and regular life of the married man secures him from falling a victim to diseases, to which the more irregular and often more dissipated life of the bachelor renders him prone. It is nevertheless a wise and special provision of nature, and as such merits notice.

But this new fact in statistics seems to explain some things which were formerly unintelligible. For instance, it has been found quite impossible to reduce the mortality of the army, even when in barracks, and not on active service of any kind, to the mortality of civil life—however perfect were the sanitary arrangements in the barracks, and however much attention were paid to the food, clothing, and exercise of the men. The above proved fact fully accounts for this. Sanitarians, in their ignorance of the powerful influence of marriage on the male mortality, were comparing the death-rate of the unmarried soldier with that of both married and unmarried in civil life. Whereas the mortality of the soldier ought to have been alone compared with the death-rate of bachelors in the civil population; and not even with that of the whole bachelors in the population, but with the mortality of bachelors living in towns, who we know die at a much higher rate than those living in the rural districts.

No one can look at the above table without seeing the immense saving of life which would result were all the bachelors above 20 years of age to marry. This would tell especially on the population of Scotland, where a much larger proportion of the marriageable males are bachelors than either in England or America.

To insurance companies, however, a table like the above ought to be invaluable, because it points out to them an unsuspected source of danger, whose influence for evil is as great as vicious habits or the existence of organic disease; or descent from a scrofulous or consumptive family.

The facts, however, which are elicited by this table are of even greater value to the statist, and to the inquirer into the sanitary condition of, or the death-rates affecting, persons engaged in different occupations and trades. This table of itself proves that almost all the conclusions hitherto published on this subject, and which were founded on the general mortality prevailing among men following different occupations, are erroneous; and that any deductions founded on a comparison of the whole number dying annually in any occupation, with the total number of persons following that occupation, are only a propagation of error. Let us exemplify what is meant by this statement.

In Table II. it was seen that at every several quinquennial age the death-rate of the married man was greatly below that of the bachelor. One would naturally expect, therefore, that a comparison of the total death-rates at all ages of the married and unmarried would show the same conclusion; in fact, one would naturally expect

that the summary of the death-rates of each class at all ages would be found to correspond with the death-rates at each age. The very reverse is the case. The summary of the table contradicts the results of every separate quinquennial period, and makes it appear that bachelors at all ages are only cut off at the rate of 1723 annually in every hundred thousand living; where the married men were cut off at the rate of 2338 deaths annually in every hundred thousand married men.

Every one can at once see that this is a false conclusion; because if at every several year of life bachelors die in much higher proportion than married men, it must be the same during the whole period of life. How, then, is the false result produced?

The anomaly is at once explained by looking either at the number living or dying at each age. Half of the whole number of bachelors in Scotland are between the ages of 20 and 26 years; and in consequence of this, the annual deaths, though very low to what they are at more advanced years, bulk so largely as compared with the deaths at all other ages, that when the whole deaths are thrown together the general mortality of the bachelors seems to be but little higher than it was at the earliest period of life from which we enumerated them, viz., 20 years. It is quite otherwise with the deaths among the married men. With them, instead of the greatest number of deaths, in any quinquennial period, being between 20 and 25 years of age, by far the greatest number of deaths occur at the three quinquennial periods from 60 to 75 years, at which period of life the mortality is high. Summing the columns, therefore, and comparing the total deaths at all ages with the total living in each class, necessarily leads us to a false conclusion. The comparison, to be correct, must be limited to that of the mortality at each several age.

It is, however, this very erroneous conclusion which pervades all the tables and papers which have been published as to the varying death-rates affecting persons following different occupations and trades, where the deductions have been based on the annual deaths in the total number of persons belonging to each occupation or trade. Such deductions not only give no correct information on the point which they profess to investigate, but they give false conclusions; and the truth is perhaps the very opposite of what it is supposed to be.

Let us take an example from a table published by one of the best statisticians of the present day, who is as renowned for his caution as for his ability in dealing with statistical inquiries, my friend Dr. William Farr, of London.

All males in England, 15 years of age and upwards, are cut off at the rate of 1816 deaths annually in every hundred thousand males at the same ages. If this gave an approximation to the mortality of the males above 15 years of age, we ought to find that persons who follow notoriously unhealthy trades should be cut off at a much higher

ratio; whereas persons who follow notoriously healthy out-of-door occupations ought to exhibit a very much lower mortality.

Dr. Farr, in the Supplement to the Registrar-General's Twenty-fifth Annual Report, published a table professing to give the first fruits of the official investigation as to the mortality of the trades and occupations in England, restricting that table (XXIV.) to sixteen selected occupations, and we are quite entitled to conclude that these occupations were selected for the purpose of showing the value of such an inquiry, and the light it threw on the death-rates of each trade or occupation. To what conclusions, then, do his published deductions lead?

It is quite notorious that one of the most unhealthy occupations in which man can engage is that of baker and confectioner. But by the table referred to, it would appear that, at all ages above 15 years, bakers and confectioners were only cut off at the rate of 1617 deaths annually; that is to say, at a much lower rate than the males of all England at the same ages.

It is equally notorious that men working in the copper, tin, and lead manufactories are cut off at a much more rapid rate than the general population; in fact, these trades are notoriously unhealthy. By the table referred to, however, that class of workers would appear to be extremely healthy, seeing that only 1220 deaths occurred annually in every hundred thousand following these occupations—a full third fewer deaths than in the general male population of all England at the same ages!

It is equally notorious that agricultural laborers, out-door workers, shepherds, &c., are the most healthy class of men in Great Britain; but by the table above referred to they are made to be more unhealthy than butchers, bakers, grocers, shopkeepers, miners, workers in copper, tin and lead, and blacksmiths: for, by that table, it appears that, at all ages above 15 years, 1736 die annually in every hundred thousand persons.

If from that table we turn to the extended tables themselves in which the deaths from each trade, profession and occupation are given, the same fallacious result appears when we compare the total annual deaths with the total number of persons following the pursuit. There is, for instance, not a more firmly established fact in vital statistics than this, that the clergy are the most healthy and long-lived of men. But by making the comparison as above indicated, they would appear to be the most unhealthy class of all, seeing that 1820 persons die annually out of every hundred thousand at all ages. Officers of the National Government, physicians, surgeons and druggists, all equally healthy professions, would by such comparisons appear to be equally unhealthy occupations as that of the clergy, for in every hundred thousand officers of the National Government 1818 died annually, while of physicians, &c., 1701 died annually.

By this false mode of comparison, therefore, clergymen, physicians,

and government officers, who have been proved to enjoy better health and to live to a much greater average age than the other professions, trades and occupations, are proved to have a higher death-rate than the most unhealthy trades.

All such deductions are false, as is satisfactorily proved by Table II. The mistake arises from comparing things which are not comparable. The comparison, if made with the population following the occupation or trade, must be made with the respective trades at each several age of life; or, better still, by finding out the average age at death, which can lead to no fallacy.

Dr. Farr must have felt himself staggered by the evidently unexpected and manifestly erroneous results brought out by comparing the total deaths with the total numbers following each profession. This is manifest from the fact that he offers no comments on the tables having reference to the comparison of the death-rates affecting the sixteen selected professions; and also from the fact that he gives an extra table arranging the deaths of these selected trades in their order of least mortality, taking the ages of 45 and 55 years! He gives no explanation why he selected that age to show such a fact, rather than the mortality at all ages.

The above facts, then, prove how careful we must be in deducing conclusions from statistics. Figures of facts, provided they are correctly drawn up, are necessarily truths; but they do not necessarily lead to true conclusions. On the other hand, as in the above-noted instances, they may lead to conclusions the very opposite of the truth. In fact, it is a much more difficult thing to arrive at a truth than most men imagine; and perhaps more difficult in vital statistics than in most other sciences.

II.—*Death-rate of Married and Unmarried Women.*

The deaths of the married and unmarried women of Scotland at each quinquennial period of life were abstracted for two consecutive years, and the results are given in Tables III. and IV. In Table III. the actual number of the married and unmarried women living in Scotland at each quinquennial period of life at the middle of the year 1862 are given, the deaths during the same year, and the proportion of deaths to the living. For 1861, however, two columns are alone given, showing the proportion of deaths in the married and unmarried women during that year, for the sake of affording the means of easy comparison with the results of 1862. By that table it will be seen that, though the proportion of deaths among the married and unmarried women at each age differed slightly during each year, there is no difference whatever as to the results of the comparison between the death-rates of the married and unmarried at each age, for excepting at the extreme ages 80 to 85, and again 90 to 95, when the numbers are too small to give constant quantities, the results of both years are absolutely identical. This almost un-

expected result confirms the general correctness of the tables prepared for each year; and shows that the facts brought out by these tables may be depended on, as demonstrating what may be called the law of nature on the subject. Our remarks may, therefore, be limited to Table IV., which gives the mean result of the two years.

TABLE III.—*Number of the Living, and Deaths of the Married and Unmarried Females in Scotland, at different Ages, in 1862; and the Percentage of Deaths to the Population at each Age. Also the Proportions for 1861.*

AGES.	MARRIED AND WIDOWED WOMEN IN 1862.			Pr cent. of married deaths in 1861.	UNMARRIED WOMEN IN 1862.			Pr cent. of unmarried deaths in 1861.
	Number Living.	Deaths.	Percentage of Deaths.		Number Living.	Deaths.	Percentage of Deaths.	
15 & under 20	3,384	25	0.738	0.983	154,829	1075	0.694	0.691
20—25	39,924	364	0.912	0.910	114,180	895	0.783	0.783
25—30	71,649	683	0.953	0.928	61,044	566	0.829	0.903
30—35	77,503	764	0.985	0.927	34,954	367	1.049	0.941
35—40	71,962	806	1.120	1.116	24,368	300	1.231	1.181
40—45	69,660	806	1.171	1.116	19,690	225	1.142	1.109
45—50	58,934	785	1.332	1.270	14,659	222	1.507	1.455
50—55	54,479	826	1.516	1.449	13,973	269	1.926	1.576
55—60	41,462	886	2.136	1.989	10,216	244	2.389	2.077
60—65	42,390	1200	2.830	2.649	11,405	370	3.244	2.715
65—70	26,242	1242	4.732	4.269	6,875	350	5.090	4.489
70—75	20,337	1342	6.549	6.627	5,544	434	7.828	6.672
75—80	12,190	1424	11.681	10.448	3,230	369	11.114	9.741
80—85	7,490	1278	17.062	15.105	1,986	332	16.717	16.236
85—90	2,646	708	26.757	23.179	682	161	27.663	25.597
90—95	763	282	36.972	32.147	181	55	30.386	39.778
95—100	203	94	46.305	36.138	48	20	41.666	35.416
100 and above	34	17	50.000	50.000	23	3	13.042	26.087
Age not stated	—	11	—	—	—	3	—	—

TABLE IV.—*Mean annual Percentage of Deaths among the Married and Unmarried Women of Scotland, at different Ages, during the two Years of 1861 & 1862.*

AGES.	PERCENTAGE OF DEATHS.		AGES.	PERCENTAGE OF DEATHS.	
	Married and Widowed.	Unmarried Women		Married and Widowed.	Unmarried Women.
15 & under 20	0.860	0.692	60 & under 65	2.739	2.979
20—25	0.911	0.783	65—70	4.500	4.789
25—30	0.940	0.866	70—75	6.588	7.250
30—35	0.956	0.995	75—80	11.064	10.427
35—40	1.118	1.206	80—85	16.083	16.476
40—45	1.143	1.125	85—90	24.968	26.630
45—50	1.301	1.481	90—95	34.559	35.092
50—55	1.482	1.751	95—100	41.221	38.541
55—60	2.062	2.233	100 and above	50.000	19.064

When the mean annual per centage of deaths in the married and unmarried women at each quinquennial period of life is compared, it is found that the married die in a higher ratio during the three quinquennial periods of life, 15—20, 20—25, and 25—30 years; but that during the next two quinquennial periods, viz. from 30—35 and from 35—40 years, during which half of the children are born, the married die at a lower rate than the unmarried.

At the age when the usual "change of life" occurs, viz. between 40 and 45 years of age, the mortality of the married woman slightly exceeds that of the unmarried;—a result which might have been expected, seeing that the fatigues of child-bearing, and nursing, and the

harder labor connected with the rearing of her family somewhat weakens the system, and renders that critical period of life more trying to the married than to the unmarried woman.

From 45 years to old age, that is to 75 years, the married women die in smaller proportion than the unmarried; but above that age the numbers are too small to afford any basis for conclusions, though by the tables the chances are still in favor of the married woman from 80 to 95 years of age.

It will be seen that at every quinquennial period of life the difference between the death-rates of the married and unmarried women is very much less than that between the married and unmarried men. It is thus demonstrated, for the first time, that marriage exerts a much more powerful influence on the male than it does on the female; for whereas the influence of marriage on the female death-rate is comparatively trifling, it is of the most marked and potent kind on that of the male. The common belief has always been the reverse of this. The common belief has always been that marriage, by adding to the female the additional dangers of child-bearing, would be found to increase her mortality; but it was never even once suspected that it would make any difference in the mortality of the male. These facts, however, whose correctness there is no denying, disprove all this, and prove that marriage exerts a much more powerful influence on the mortality of the male sex than all imagined sanitary improvements could ever hope to effect.

To return to our table. It was seen that at the three quinquennial periods 15—30 years, married women died at a somewhat higher rate than the unmarried. Thus from 15 to 20 years in every hundred thousand married women, 860 died annually; whereas in a like number of unmarried women only 692 died. From 20 to 25 years of age, of every hundred thousand married women, 911 died annually; whereas in a like number of unmarried women only 783 died. From 25 to 30 years of age, in every hundred thousand married women, 940 died; whereas in a like number of unmarried women at the same ages, only 866 died.

During the next two quinquennial periods of life, however, the married women died in a lower ratio than the unmarried. Thus from 30 to 35 years of age, in every hundred thousand married women, 956 died annually; but in a like number of unmarried women at the same age, 995 died annually. From 35 to 40 years of age, in every hundred thousand married women, 1118 died annually; but in a like number of unmarried women at the same ages, 1206 died.

As nearly half of the children who are brought into the world are produced by mothers 30 years of age and upwards, it is worth while to ascertain why it is that the mortality of the married under 30 years of age is higher than that of the unmarried under 30; while the death-rate of those bearing children above 30 years of age is less than that of the unmarried. The fact that the death-rate of the

married women from 30 to 40 years is lower than that of the unmarried, proves of itself that it is not mere child-bearing which increases the mortality of the married women under 30 years of age. Yet it must be connected with child-bearing, else the mortality would have remained as low as in the unmarried. For this cause we have not far to seek.

Every medical man knows that the risk to the mother is far greater at the birth of her first child than at any subsequent delivery; and it is extremely probable that the whole extra mortality of the married female under 30 years of age, may be caused by the greater dangers which attend the birth of her first child. Indeed this may be considered to be demonstrated by the following considerations and facts.

In the Second detailed Annual Report of the Registrar-General of Scotland, viz. for the year 1856, a table was given, showing the ages of all the women in Edinburgh and Glasgow who gave birth to children in 1855, and also the number of children to which each woman had given birth.

TABLE V.—*Number of Mothers in Edinburgh and Glasgow in 1855; the number of these who were confined with their first Child, and the proportion per cent. of Mothers who bore their first Child.*

<i>Ages of Mothers.</i>	<i>Total Number of Mothers.</i>	<i>Number of Mothers bearing their first Child.</i>	<i>Proportion of Mothers bearing their first Child to every 100 Mothers at each Age.</i>
15—20 years	403	354	87.8
20—25	3814	1921	50.3
25—30	5057	1019	20.1
30—35	3943	331	8.3
35—40	2395	124	5.1
40 and above	961	32	3.3

Table V. is prepared from that table, and it shows the proportion of mothers at each quinquennial period of life who bore their first child at these respective ages. That table at once demonstrates that the higher mortality of the married woman between the ages of 15 and 30 years, is solely due to the superadded dangers which attend the birth of the first child. Thus between 15 and 20 years of age, 87 per cent. of the mothers gave birth to their first child. From 20 to 25 years of age, 50 per cent. of all the mothers who were confined, gave birth to their first child; while from 25 to 30 years of age, 20 per cent. of the mothers gave birth to their first child. Above that age the proportion of women giving birth to their first child was quite trifling, gradually diminishing from 8 to 3 per cent.

It was only, then, at the ages when a very large proportion of the married women were giving birth to their first child, that the death-rate rose higher than that of the unmarried women. But the moment that age was attained when the great majority of the women had got over the birth of their first child, viz. 30 years, the mortality fell even below that of the unmarried women. This seems clearly to prove that it is bearing the first child which causes the higher mor-

tality of mothers between 15 and 30 years of age. In fact, the table seems to prove that after the birth of her first child, the married woman, even from 15 to 30 years of age has an equal chance of life with her unmarried sister, and after she has passed her 30th year, and during the whole of her remaining child-bearing period, has a better chance of life than the unmarried woman.

Seeing these things are so, there is nothing to prevent the higher mortality of the married woman under 30 years of age, being quite arrested. Medical men all know whence the dangers of the first birth arise. The causes are almost entirely removable. They are causes almost wholly due to our civilization and faulty habits, which produce an overexcitable, unduly stimulated, yet worn out frame, where health and vigor ought alone to exist.

Edinburgh, August, 1866.

Bibliographical Notices.

Eleventh Annual Report of the Trustees and Superintendent of the Northampton (Mass.) Lunatic Hospital.

THE Trustees commend the plan of treatment pursued, the system of purchase and distribution of supplies, and the economical management of the affairs of the hospital during the past year; and although the current expenses, including some extraordinary outlay for necessary repairs and permanent improvements, have been met from the income of the institution, they suggest that it would be well to have some working capital, "a sum so large as to prevent the necessity of borrowing."

The Superintendent, Dr. Pliny Earle, reports the number of patients in the hospital Oct. 1, 1865, as 352—158 males and 194 females. Admitted during the year, from general population, 94—56 males and 38 females; from other State hospitals, 38—16 males and 22 females; from State Almshouse, Monson, 4—3 males and 1 female. Whole number under treatment, 488—233 males and 255 females. Number discharged, including deaths, 83—51 males and 32 females; number remaining Sept. 30, 1866, 405—182 males and 223 females.

Of those discharged, 24 were recovered—15 males and 9 females; 20 were improved—13 males and 7 females; 8 were unimproved—5 males and 3 females; and 31 died—18 males and 13 females.

Of the deaths, 13 were of private boarders, and the ages of four were 80, 81, 85, and 81 years respectively. Three deaths were from that fatal form of mental disorder and cerebral disease, typhomania, and occurred in *two, seven* and *ten* days, respectively, after their admission. The other deaths were caused, mostly, by phthisis and marasmus.

With regard to medical treatment, the Doctor says:—"It is still based on the same general principles which were briefly mentioned in the last report, and there is little of novelty to be mentioned in this connection." "The 'new cure' for epilepsy—bromide of potassium—

has been freely used in a considerable number of cases, without other favorable result, hitherto, than a mitigation of the severity of the disease in a few of them." "The cases here are all chronic; it may be more efficient in the earlier stages of the disease."

Work with the hands is considered here, as elsewhere, the most powerful of those hygienic and curative agents and influences which are classed under the general term, "moral treatment"; and the Superintendent thinks in no year has this agent been more extensively applied than in that which has just closed. From the records kept of all the days' work done by patients during nine months in all departments, it amounts to 25,081 days; though a large part, he adds, "is of course far less efficient than that of healthy men and women."

Services in chapel have been, divine worship on the Sabbath, conducted by the clergymen from the village in rotation, and a variety of entertainments on week-day evenings, such as lectures by the Superintendent and others, readings of the Holy Scriptures, poetry, &c., and singing; and once a week, except in the warmest weather, a social gathering on one of the rotunda floors, when dancing is allowed.

The practice of enticing patients to a hospital by false pretences, formerly very common, is still not wholly discontinued by well meaning but very injudicious friends, and is justly condemned by all who have the care of insane persons. In speaking of this matter, Dr. Earle says, "It being decided to place a person in the hospital, let him be frankly informed of that decision." "By proper management, in doing this, he will generally consent to the change, or, at least, will not oppose it." "If he does not consent, and does oppose, better by far that he should be brought manacled and bound from head to foot, than that he should be lured by promises made to be broken, and by anticipations which are doomed to disappointment."

The daily routine of hospital life is minutely described—improvements both of farm and buildings noted; and the report closes with the usual acknowledgments to assistants and donors.

Annual Report for 1866, of the Trustees and Superintendent of the Butler Hospital for the Insane, at Providence, R. I.

During the past year, the Trustees report the addition of twelve and a half acres of land to the Hospital farm, first by purchase, but finally as a gift from Alexander Duncan and Robert H. Ives, the same gentlemen who gave the funds for the new building which was completed early in the season, designed for the benefit of the patients, and devoted—the lower story, to two bowling alleys with separate entrances for males and females—and the second story, to a billiard room with two tables, and a reading room or museum. In elegance of construction and interior finish, and in the completeness of its appointments, this building is said to be unequalled, or even unapproached by any thing of a similar kind, either in this or any other country.

A very important item in the report is the fact of the resignation of Dr. Isaac Ray, their able and accomplished Superintendent, who has had charge of the Hospital from the beginning, and previously held a similar situation in the Maine Hospital. Before assuming his duties at the Butler Hospital, he visited and examined thoroughly the Hos-

pitals for Insane in England, France and Germany. Fortunate indeed were the Trustees in securing the services of Dr. Ray for their new Institution, a man of such rare qualifications for the office. The yearly reports that have gone forth from his pen, have made the name of the "Butler Hospital" an honor at home and abroad, and every line of them is worthy to be read and pondered by all who have the mental integrity and welfare of the human race at heart.

Although Dr. Ray's resignation was received and reluctantly accepted in January, 1866, he consented to remain until a successor could be appointed, and, consequently, he did not leave until January, 1867, when Dr. John W. Sawyer, formerly assistant to Dr. Ray, and for the last five years assistant in the Wisconsin State Hospital, was appointed and assumed charge of the Institution.

From the report of Dr. Ray we learn that the number of patients in the Hospital, Dec. 31st, 1865, was 131—66 males and 65 females. During the year, there were admitted, 44—31 males and 13 females; making the whole number under care, 175.

The number discharged was 56—18 males and 38 females, leaving, on the 31st of December, 1866, 119.

Of those discharged, 24 had recovered, 3 had improved, 11 were unimproved, and 18 died.

Dr. Ray takes the opportunity in this report to review the history of the Institution from its beginning, now twenty years, and to point out its present and future wants to enable it to sustain and advance its present character in a similar manner as other institutions for the same purposes. To meet these wants at the present time, he thinks they need 80,000 dollars for necessary repairs and improvements. He devotes several pages to an exposition of the manner in which he has conducted the affairs of the Hospital, and while he thinks he may have erred sometimes, he does not wish to avoid any responsibility that properly belonged to him, and only claims the indulgence that is always due to an honest purpose and diligent endeavor.

Northampton, Feb., 1867.

C. K. B.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, MARCH 7, 1867.

THEORIES OF DISEASE.

WHEN the strong man, engaged in the active pursuits of life, is laid low by illness, his affairs left to take care of themselves as best they may, himself rendered helpless as a child by, as it were, a power inexorable, the event often creates in the popular mind a sentiment of wondering surprise. It is looked upon as a departure from the ordinary course of things; as an accident, and almost even as an impertinent intrusion. Or else it is thought that if more care had been used, if this thing had been done, or that not done, the calamity need not have occurred. This last idea has been carried so far by some as to be generalized into the statement that all diseases are the consequences of infraction of the laws of health,

if not by the sufferers, yet by their ancestors; and is suggestive of the Jewish belief that sickness was a punishment for transgression of the moral law.

Avowedly to controvert these notions is the aim of certain arguments latterly addressed to the profession. The accomplished author of these views, which are set forth in an elegantly written essay, contends that diseases are "a part of the plan of creation"; that the idea of them "must have originated in the Creator's mind"; and that though "deliberately devised they do not necessarily imply 'gratuitous malevolence.'" He founds his theory on the fact that diseases have been the heritage of the animal creation, from the fossils of a past epoch to the human species; and on the evidences of design in the history and course of various maladies.

In a certain well-established sense, we must all coincide in the above statements. But, in the course of his remarks, the writer referred to seems to take more from man's free will agency than some of us would be willing to allow. Since this theory is announced as a denial of the popular ideas before mentioned; and, also, from the general drift of the essay in which it is advanced, the inference appears to be that disease is to be considered as predestined, imposed as a necessity on the physical organization, and scarcely more within the sphere of human agency than the winds, the tides, the rain, or the drought. Our author, however, himself seems to shrink somewhat from so sweeping a generalization. After saying that "we may not often prevent their coming," he adds, before finishing the sentence, "we may seek with some certainty of success to evade their approach." But, as a general thing, he seems to discourage the expectation of avoiding, arresting, or controlling them.

Now, we do not anticipate that disease is to be eradicated from the world much before the millennium; and, we are fully aware that all of us who do not perish from violence or accidental injury, will be carried off, sooner or later, by some disorder. We do not gradually wither up, and disappear, nor suddenly subside into dust, like the "one-hoss shay" (in the fable of that name), which had no part weaker than the rest. Still it strikes us that the arguments used to sustain this doctrine that disease is a part of a fixed and unalterable plan, as much and in the same way as are the processes of reproduction, of growth and decay, prove too much. For, as its author himself sets forth, what are termed *injuries*, which are obviously in large measure the result of human agency, accidental (so-called) or intentional, are equally universal as diseases. And we claim that they show quite as evident marks of design, in the provision for them, as events that were to come about in some way, through the mysterious relation between the Creator's ever-present providence and the creature's free will. We see design manifested in the arrangement for the expulsion of foreign bodies, for the effacing of solutions of continuity, and particularly for the union of fracture, with its provisional callus in the shaft of a bone, but with none in the capsule of its joint where it would do harm.

But, leaving the abstract discussion of the origin of disease to merge itself in the more general one of the *origin of evil*, and looking at the question from a practical point of view, we find our knowledge of the subject limited to a very simple statement. Disease sometimes occurs, as in the case of syphilis, in the form of retribution for transgression, on the part of the victim, or his parentage; sometimes as the consequence of imprudence; sometimes, indeed, as a misfortune, inevitable in the present state of our knowledge. By the terms of the

statement, the first two classes are not *predestined* to us regardless of our volition. To cite examples, we have pneumonia occurring as the effect of meteorological changes, which we can also often resist in proportion to our means of shelter and habiliment; variola, which is spread largely by contagion, which could formerly be escaped only so far as isolation was practicable, but which we can now, to a great extent at least, protect ourselves against by the wonderful discovery alike and invention of vaccination; intermittent fever, which we need not have, unless necessity or duty bring us into certain marshy districts; typhoid fever, which, indeed, we as yet know not how to avoid. The first instance, pneumonia, represents a group of complaints which, as we usually see them, we are not able to break up, but which we can alleviate; intermittents we do stop by quinine; varioloid and typhoid fever are illustrations of large classes of diseases, which, in the present state of our knowledge, we cannot arrest, and probably cannot shorten, but may ameliorate. In their mortality, too, these last mentioned can only be lessened by promoting the "endurance" of the patient while the malady passes through its "succession of processes." Yet, in that way alone, something may be done. The enlightened practitioner (who truly appreciates the "cure" of his patients), by the timely administration of an opiate or a purgative, and by the careful direction of that aggregate of attentions which constitutes good nursing, may, nay must, sometimes turn the scale, wavering between life and death, and thus add somewhat to the number of recoveries.

But we must not forget the gradually increasing list of disorders, of which to know their causes is to avoid or remove the latter, and the morbid phenomena with them; as, for instance, the lesions produced by the acarus, the tænia, the trichina, and other parasites.

In fine, let us remember that the same hand which sent us *pain* gave us *opium*. We know nothing more appropriate in etymology than the derivation of the name of one of the preparations of that drug—viz., *laus Deo*.

Having already occupied more than our allotted space in speaking of the origin of disease and our control over it, we can barely allude to a theory of its essential nature, advanced by Dr. Ellis in his address to the Medical School of Harvard University. Dr. Ellis argues that vital phenomena are not distinct from physical, but are intimately interwoven with them; that diseases are not separate entities; but that morbid phenomena are simply perversions of healthy action; and that the two merge into each other by as imperceptible gradations as those which lead from sanity to insanity. We would add that an analogy may be borrowed from the moral world, where it is claimed by some that the evil passions are merely perversions of healthy and rightful instincts. This theory is enforced by various weighty citations of fact, and we are gratified to regard it as in harmony with the views we have above advocated.

As we now for the first time occupy the Editorial chair, we have thought it might not be improper to state the views we have given above.

We are well aware that it would be no easy task for any one to attempt to fill the place vacated by our predecessor—a hopeless one perhaps for ourselves. And we do not forget that among the readers of this JOURNAL are many who are fitted to be our teachers. We can only promise our endeavors to perform the duties of the position we now assume, with diligence, firmness and impartiality.

REMARKABLE CASE OF LARYNGOSCOPIC SURGERY.

At the monthly meeting of the Suffolk District Medical Society, on the 23d ult., Dr. H. K. Oliver, at the request of the President of the Society, reported a case so rare as to induce us to make it the subject of special mention. This was the extraction, through the mouth, by the aid of the laryngoscope, of a tumor from the right vocal cord, with complete restoration of the vocal functions. We are not in possession of the details of the case, which will, however, of course, be brought to the notice of the profession in due time, but the main facts are as follows :—

The patient was a male adult, who was brought to Dr. Oliver by his ordinary medical attendant in May, 1866, having entirely lost his natural voice for a period of ten months. A laryngoscopic examination showed the cause of the trouble to be a tumor, the greater part of which was buried in the body of the right vocal cord. The free portion was about the size of a pea, which, in the closure of the glottis, pressed against the left cord. The normal action of both cords was therefore completely annulled. The removal was accomplished by the combined employment of incisions and caustics, under the guidance of the laryngoscope, after a patient series of operations extending over a period of more than three months, with entire safety to the vocal cord. The patient was present at the meeting of the Society referred to, and read a few sentences from a book; and it was difficult to believe that one of his vocal cords had been the seat of a morbid growth. At the close of the meeting, Dr. Oliver lighted up the interior of the larynx for the inspection of the members of the Society, and a cicatrix, marking the former site of the tumor, was plainly visible upon the cord.

The tumor was, according to Dr. Ellis's microscopic examination, fibro-plastic in nature. Of course, its recurrence is a matter of possibility, and it was Dr. Oliver's intention to wait still longer before reporting the case as completed, but nearly six months having elapsed since the removal, he seems to have been quite justified in yielding to Dr. Bowditch's desire to bring it to the notice of the District Society. Whatever the future may bring forth, the case, as it now stands, presents one or two most interesting points, which we shall be pardoned for referring to.

It is only quite recently that the profession, generally, have been willing to believe that the larynx could be made to tolerate the presence of an instrument for a period of time sufficient even for the seizing of a pediculated growth within its cavity, and the project of employing anything stronger than the solutions of nitrate of silver was, with apparent reason, deemed extremely hazardous. Dr. Oliver's case, however, shows that it is possible to employ cutting instruments and the most powerful caustics, with perfect immunity to the healthy structures and with no extraordinary degree of discomfort to the patient.

Notwithstanding, however, the aid which the laryngoscope affords, in manipulating within the larynx, the history of the extirpation of sessile growths in this organ shows that time is often necessary for their removal. Especially must this be true when a vocal cord is the seat of the growth, and any reasonable length of time would seem to be well spent, provided the cord could be, eventually, preserved uninjured.

We deem it fortunate that the case presented itself in this part of the country, for, although laryngoscopy has already taken a place among us as a most im-

portant aid in medical practice, such a result of an operative procedure as we are now able to record, cannot fail to enlist at once entire confidence in the resources of this art.

We would add that Dr. Bowditch, whose specialty has shown him much of diseases of the larynx, pronounces an encomium on this operation, the purport of which is, that the latter is the most beautiful and striking innovation in surgery of which he has been cognizant for years.

THE number of this JOURNAL issued September 27th, 1866, contained an editorial which we have reason to believe did great injustice to a well-known chemical house in this city. It had not at the time the sanction or approval of the publishers, and we are satisfied that justice to the parties alluded to requires this *amende* from us.

A.

THE Medical Faculty of Harvard University entertained the medical class at a social gathering at the Revere House on Friday evening, March 1st. There were also a number of other invited guests from among the physicians of Boston and vicinity, besides one or two not of the profession. Among the latter we recognized Mr. Ball, of the Board of Trustees of the City Hospital, and the Rev. Dr. Neale. The Navy was represented by Dr. S. F. Coues, of the U. S. Hospital at Chelsea. The spacious reception rooms of the hotel were well filled, and a handsome collation was provided. The number of undergraduates is over three hundred.

FOR the information of those members of the profession who wish to attend the surgical visits at the Massachusetts General Hospital, the following announcement is made. The arrangement, for the next two months, will be as follows:—Dr. Warren will visit with surgeons, on Saturdays at 10 o'clock; Dr. Clark at the same hour on Wednesdays. Dr. Clark will visit with the students at 10 o'clock on Saturdays; Dr. Warren on Wednesdays. Surgical operations on both days at 11 o'clock.

During the months of May and June this plan will be reversed—Dr. Warren visiting with surgeons on Wednesdays, Dr. Clark on Saturdays.

Appointment at the Boston Eye and Ear Infirmary.—Dr. B. Joy Jeffries has recently been appointed one of the Surgeons of this Institution.

We also learn that the same gentleman has been chosen lecturer on Diseases of the Skin at the Berkshire Medical College.

WE would call attention to the advertisement of Mr. Wilson in the advertising columns of this week's JOURNAL. To purchasers of surgical instruments, Mr. Wilson offers rare advantages for buying at greatly reduced prices.

THE *Union Médicale* says:—"We read in a letter from Leipzig, published in the *Augsburgh Gazette*, that Professors Griesenger, Pettenkofer and Wunderlich have met here to prepare a set of prescriptions for the treatment of cholera, which they propose to publish. Dr. Macpherson, who has made a special study of cholera in India, has arrived to aid them in their conferences. These four physicians are unanimous in the opinion that cholera is propagated by subterranean waters.

Massachusetts Medical College.—The Annual Commencement for the conferring of medical degrees will take place at the College on Wednesday, March 13th. The exercises will commence at 11½ o'clock, A.M., with a prayer by President Thomas Hill, D.D., after which graduates will read selections from their dissertations. The degrees will then be conferred by the President, and the exercises will conclude with an address by Prof. Louis Agassiz, LL.D.

The Corporation and Board of Overseers of the University will be present on the occasion, and the Fellows of the Massachusetts Medical Society, all medical students, and all persons who may be interested in medical science, are hereby respectfully invited to be present.

GEORGE C. SHATTUCK, M.D.,

Wednesday, March 6, 1867.

Dean of the Medical Faculty.

The new Treatment of Rheumatism. MESSRS. EDITORS,—I am glad you published Trousseau's formula from Parrish, as it enables me to correct an error. I had not read it before, but simply saw it was announced as in Parrish's book. Trousseau's own statement is of a syrup saturated with lime. "*Il se prépare en saturant le sirop de sucre par le chaux et en filtrant.*" On looking at Parrish, I find that it is to be made of *slaked lime*. This is entirely wrong. *It should be made of caustic lime*. The best formula would be to mix two (2) ounces of lime unslaked and eight (8) ounces of sugar together in the mortar, and pour over the mixture a wine pint of boiling water. Filter and add boiling water enough to make up the pint. By the use of boiling water, the operation is more rapid and the formation of lumps is avoided. Of this I have given as much as forty-five (45) drops every two (2) hours in one case of acute rheumatism. Generally, thirty-five (35) drops in half (½) a tumblerfull of milk every three (3) hours has been enough. The diet in my cases has been left to the patient's choice.

Very truly yours,

C. E. BUCKINGHAM.

Vital Statistics of Providence, R. I., for the Year 1866.—The number of marriages in Providence during the year 1866 was 793. This number was 84 more than in 1865, and 54 more than were ever before reported in Providence in any single year. There were 1,632 births reported in 1866, or 334 more than in 1865. The population of Providence in 1865 was 54,595. It may safely be estimated at 56,000 in 1866. This would give, during the year 1866, one birth to 34·3 of the population; one person married in 35·3 of the population; one person died in 54·0 of the population. There was a gain, during the year 1866, of 596 in the population, by the excess of births over deaths; in the previous year the gain was only 87.

Absence of Kidney.—Mr. W. Symonds, of Ross (*Lancet*), examined a man who had died from typhus, and found entire absence of the right kidney, although the right supra-renal capsule was then natural and healthy. The left kidney weighed seven and a half ounces, and was healthy.—*Canada Medical Journal*.

Insects, Fabricators of Iron.—It is well known that some insects are skilful spinners, but it was not known that some of them fabricated iron. A Swedish naturalist, M. de Sjogreen, has published a curious memoir on this subject. The insects in question are almost microscopic; they live beneath certain trees, especially in the province of Smaland, and they spin, like silk-worms, a kind of ferruginous cocoons, which constitute the mineral known under the name of "lake ore," and which is composed of from 20 to 60 per cent. of oxide of iron mixed with oxide of manganese, 10 per cent. of chloric, and some centimetres of phosphoric acid. The deposits of this mineral may be 200 metres long, from 5 to 10 metres wide, and from 8 to 30 inches thick.—*Medical News*, from *Revue de Thérap. Méd.-Chirurg.*, Sept. 15, 1866.

THERE was recently described in a paper read before the Royal Society of London a microscope which exceeds what has been considered the utmost attain-

ble limit of perfection in this instrument. It magnifies three thousand diameters with its lowest eye-piece, and fifteen thousand diameters with its highest, so that an object is made to appear one billion five hundred seventy-five million times larger than it really is.—*American Artizan*.

A DEATH from chloroform took place recently at Bellevue Hospital on the occasion of the performance of a rhinoplastic operation by Prof. Hamilton. The patient was a robust, middle-aged Irishwoman, whose nose had been bitten off in an encounter with a negro.—*Medical Record*.

Rush Medical College, Chicago, Ill.—The Annual Commencement exercises in this Institution took place on the 30th of January. The degree of Doctor of Medicine was conferred on 72 members of the Class; and the honorary degree was conferred on Dr. David Prince, of Jacksonville, Ill., and Dr. Ezra S. Carr, of Madison, Wis. The address to the graduating Class was delivered by Prof. E. Ingalls. As already announced, Prof. M. Gunn, of Michigan, has accepted the chair of Surgery made vacant by the death of Prof. Brainard. A professorship of Surgical Anatomy and Military Surgery has been created, to which Prof. Edwin Powell has been elected.

At the Annual Commencement of the Medical Department of the University of Buffalo, February 26th, the degree of Doctor of Medicine was conferred on forty graduates. The charge to the graduating Class was delivered by Prof. James P. White, and the valedictory address by Milton G. Potter, A.B. M.D.

The Long Island College Hospital had 109 matriculants and 49 graduates at its session for 1866.

VITAL STATISTICS OF BOSTON.
FOR THE WEEK ENDING SATURDAY, MARCH 2d, 1867.
DEATHS.

	Males.	Females.	Total.
Deaths during the week	43	36	79
Ave. mortality of corresponding weeks for ten years, 1856—1866	42.7	43.6	86.3
Average corrected to increased population	00	00	95.06
Deaths of persons above 90	0	0	0

JOURNALS AND PAMPHLETS RECEIVED.—*Medical Record*, Nos. 24 and 25.—*Medical and Surgical Reporter*, Vol. xvi., Nos. 6-8.—*Buffalo Medical and Surgical Journal* for February and March.—*Chicago Medical Examiner* for February.—*Medical Reporter*, Nos. 6-8.—*Nashville Journal of Medicine* for February.—*Richmond Medical Journal* for February.—*Atlanta Medical and Surgical Journal* for February.—*Galveston Medical Journal* for November and December.—*L'Union Médicale*, Nos. 13-21.—*London Lancet* (reprint) for February.—*Chemist and Druggist* for February.—*Journal of Materia Medica* for February.—*Detroit Review of Medicine and Pharmacy* for February.—*Druggists' Circular* for March.—*Boston Journal of Chemistry and Pharmacy*, No. 5.—*Dental Cosmos* for February.—*University Journal of Medicine and Surgery*, No. 10.—*Herald of Health* for March.—*Hall's Journal of Health* for March.—*Phrenological Journal* for March.—*Proceedings of the Pathological Society of Philadelphia*, Vol. II.—*Third Annual Report of the Board of State Charities of Massachusetts*.

COMMUNICATIONS RECEIVED.—*The Pathological Physiology of the Brain in Cholera*. By Dr. E. Mesnet. Translated by Theodore W. Fisher, M.D.—*Sore or Excoriated Nipples*. By Daniel V. Folts, M.D.

DEATHS IN BOSTON for the week ending Saturday noon, March 2d, 79. Males, 43—Females, 36. Apoplexy, 1—disease of the bowels, 1—disease of the brain, 4—bronchitis, 4—consumption, 15—convulsions, 4—croup, 2—debility, 1—diarrhoea, 1—dropsy, 1—dropsy of the brain, 1—epilepsy, 1—scarlet fever, 2—typhoid fever, 3—haemorrhage, 2—disease of the heart, 3—infantile disease, 3—inflammation, 1—intemperance, 1—disease of the liver, 1—disease of the lungs, 1—inflammation of the lungs, 3—marasmus, 1—measles, 1—old age, 1—paralysis, 1—premature birth, 2—scrofula, 1—smallpox, 4—disease of the spine, 2—syphilis, 1—teething, 2—unknown, 5—whooping cough, 2.

Under 5 years of age, 31—between 5 and 20 years, 8—between 20 and 40 years, 22—between 40 and 60 years, 12—above 60 years, 6. Born in the United States, 61—Ireland, 11—other places, 7.